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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,094	10/25/2001	Steve Horvath	18360-233640	3388

7590

12/10/2003

Devon A. Rolf
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Olathe, KS 66062

EXAMINER

HERNANDEZ, OLGA

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 12/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/029,094

Applicant(s)

HORVATH ET AL.

Examiner

Olga Hernandez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 44-53 is/are allowed.
- 6) ☒ Claim(s) 1-8 and 39-42 is/are rejected.
- 7) ☒ Claim(s) 9-38 and 43 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-53 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 8, 39 and 40 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuntman et al (2002/0075171).

As per claim 1, Kuntman discloses:

- a central processing unit (figure 1);
- a memory coupled to the processing unit (it is inherent for a processing unit to have any memory coupled to it); and
- a display screen coupled to the central processing unit, the central processing unit being configured for executing the steps of (figures 1 and 10);
 - o determining whether a target aircraft is within a predetermined monitoring zone (paragraph [0128]); and

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- responsive, at least in part, to the target aircraft being within the predetermined monitoring zone, displaying a closure indicator on the display screen (paragraph [0136]).

As per claims 2, 39 and 40, it is inherent to not display anything if it is out of the range.

As per claims 3 and 8, Kuntman discloses allowing a user to modify at least one boundary of the predetermined monitoring zone (paragraph [0045]).

Claim 41 is rejected under 35 U.S.C. 102(e) as being anticipated by Farmakis et al (6,314,366).

As per claim 41, Farmakis discloses comparing a track of a target aircraft with a track of an own ship aircraft; and responsive, at least in part, to the track of the target aircraft being within a predetermined variation of the track of the own ship aircraft, displaying a closure indicator on the display screen (column 8, lines 1-25 and column 12, lines 40-59).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuntman et al (2002/0075171) as applied to claim 1, further in view of Ammar et al (5,945,926).

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As per claim 4, Kuntman does not teach the predetermined monitoring zone is adjacent a front of an own ship aircraft. However, it would have been obvious to one of ordinary skill in the art that the predetermined monitoring zone is adjacent a front of the aircraft in order to avoid a collision. Further, Ammar teaches it in figure 1. Therefore, it would have been obvious to one of ordinary skill in the art to combine the aforementioned inventions in order to supplement the traffic alert and collision avoidance system by providing warnings of potential runway or mid-air collisions, even when the intruding aircraft is not equipped with an air traffic control radar beacon system transponder.

As per claim 5, Kuntman does not teach the monitoring zone is substantially con-shaped segment of airspace. However, Ammar teaches it in figure 1. Therefore, it would have been obvious to one of ordinary skill in the art to combine the aforementioned inventions in order to supplement the traffic alert and collision avoidance system by providing warnings of potential runway or mid-air collisions, even when the intruding aircraft is not equipped with an air traffic control radar beacon system transponder.

As per claim 6, Kuntman does not teach an apex of the cone-shaped segment of airspace is positioned adjacent a front end of the own ship aircraft, and wherein an axis of the cone-shaped segment of airspace is substantially collinear with a track of the own ship aircraft. However, Ammar teaches it in figure 1. Therefore, it would have been obvious to one of ordinary skill in the art to combine the aforementioned inventions in order to supplement the traffic alert and collision avoidance system by providing warnings of potential runway or mid-air collisions, even when the intruding aircraft is not equipped with an air traffic control radar beacon system transponder.

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As per claim 7, Kuntman teaches the cone-shaped segment of airspace is about 40 degrees. However, Ammar teaches it in figure 1. Therefore, it would have been obvious to one of ordinary skill in the art to combine the aforementioned inventions in order to supplement the traffic alert and collision avoidance system by providing warnings of potential runway or mid-air collisions, even when the intruding aircraft is not equipped with an air traffic control radar beacon system transponder.

Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farmakis et al (6,314,366) as applied to claim 1, further in view of Kuntman et al (2002/0075171).

As per claim 42, Farmakis does not teach: determining whether a target aircraft is within a predetermined monitoring zone; and responsive, at least in part, to the target aircraft being within the predetermined monitoring zone, displaying a closure indicator on the display screen. However, Kuntman teaches: determining whether a target aircraft is within a predetermined monitoring zone (paragraph [0128]); and responsive, at least in part, to the target aircraft being within the predetermined monitoring zone, displaying a closure indicator on the display screen (paragraph [0136]). Therefore, it would have been obvious to one of ordinary skill in the art to combine the aforementioned inventions in order to provide synthesized information to pilots by directly presenting information required for higher levels of situation awareness and decision making criteria used by the alerting system to pilots, whereby pilots are able to understand the basis for automatic commands.

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Allowable Subject Matter

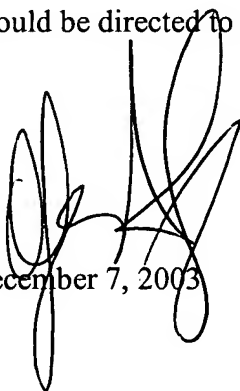
Claims 44-53 are allowed.

Claims 9-38 and 43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Hernandez whose telephone number is (703) 305-0918. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William A. Cuchlinski can be reached on (703) 308-3873. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.



December 7, 2003

Olga Hernandez
Examiner
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